

Available online at www.sciencedirect.com**ScienceDirect**

Procedia Environmental Sciences 20 (2014) 553 – 562

Procedia
 Environmental Sciences
The 4th International Conference on Sustainable Future for Human Security, SustaiN 2013

Model of Environmental Communication with Gender Perspective in Resolving Environmental Conflict in Urban Area

*(Study on the Role of Women's Activist in Sustainable
Environmental Conflict Management)*

Donna Asteria^{a*}, Esti Suyanti^b, Dyah Utari^c, Dewangga Wisnu^d

^aCommunication Department, Faculty of Social and Political Science, Universitas Indonesia, Depok, 16424, Indonesia

^bUrban Studies Graduate, Universitas Indonesia, Depok, 16424, Indonesia

^cFaculty of Public Health, Universitas Indonesia, Depok, 16424, Indonesia

^dFaculty of Computer Science, Universitas Indonesia, Depok, 16424, Indonesia

Abstract

Conflicts over natural resources in urban areas have led to the reduction in the quality and capacity of the environment which transformed into an environmental conflict. The participation and involvement of women as environmental activists are very important in the environmental communication process and environmental conflict resolution. This study aims to identify factors that influence the activity of environmental communication by women activists in resolving environmental conflicts in urban areas caused by environmental problems, as the consequence of city change project that was not well planned. The study was conducted in three study sites, Jakarta, Tasikmalaya, and Malang, by distributing questionnaires to 140 respondents consisting of women activists who care about environmental activities. To analyze the relationship between these components, this research was carried out by regression analysis followed by path analysis. Hypothesis test results showed, with the results of correlation coefficient of 0.837, this shows the relation X1, X2, X3, and Y is a strong relationship, and all three basically independent variables have influence and can explain the dependent variable with a value of 69.3%. Theoretically, this indicates that the variable X3 (understanding of the situation of environmental conflict), the main factor that affects the individual's ability to communicate to resolve environmental conflicts. The finding of this research indicates an existence of environmental communication model with gender perspective from women activists that are engaged in the environmental field which can contribute in environmental conflict management in urban areas in the research site, to achieve environmental security.

* Corresponding author Tel.: +62-21-7270152; fax: +62-21-78849119.
E-mail address: donna@ui.ac.id

© 2014 The Authors. Published by Elsevier B.V. Open access under [CC BY-NC-ND license](#).

Selection and peer-review under responsibility of the SustaiN conference committee and supported by Kyoto University; (RISH), (OPIR), (GCOE-ARS) and (GSS) as co-hosts

Keywords: Environmental communication; environmental conflicts management; the role of women's environmental activist; gender perspective; environmental security

1. Introduction

The reduction of environmental quality and its carrying capacity made the conflict of natural resources transformed into an environmental conflict. Degradation and environmental issues create a conflict that leads to environmental security. Environmental security in this study is focused on environmental conflict because of environmental degradation [1]. Environmental insecurity will disrupt the continuity of human life, and the women will be the victims of the environmental problems that occur. Because of their close contact with the environment and use of natural resources, women are often affected by environmental conflicts, which lead to resource depletion and degradation of the environment. This poses risks on women's lives and space. Marginalized woman as a vulnerable group against environmental conflict in some places has been an "engine" which is able to persuade people in the community to maintain and preserve the environment [2]. Women can act as agents of change that can respond to environmental changes better than men, with such an active role in the traditional roles of men in situations of natural disasters.

Women and men have different interests, and their needs relate differently with the environment. It is out of these differences that both have different roles in the environment [3]. The involvement of women in environmental conflict management was examined through environmental communication approach [4]. Some cities in Indonesia have shown that the environmental communication by women activist could raise awareness and raise public participation in environmental conflict management. The involvement of women in all levels of prevention, peace-building in conflict management and conflict resolution environment to support efforts to empower citizens through communication environment in their communities. This act has become the social capital to achieve sustainable environmental management.

Environmental communication is essentially the process of distribution of information that is part of the symbolization of the physical environment and the natural systems that are interrelated to each other. Study on environmental communication is not just about how to communicate between individuals in the effort to reach awareness, and changes in behavior become more pro-environment, but also related to the communication situation carried out in conditions of ongoing environmental conflict [5].

Currently, the worse environmental problems occur in many cities in Indonesia. The role of women in environmental preservation becomes crucial because it has not reached critical momentum and is "covered" by the situation of environmental pollution and damage that occurs. One example of the implementation of environmental communication approach that has successfully resolved environmental conflicts in Kampung Bonang and Tambak at Central Jakarta was in 2011. Environmental communication conducted through family welfare education, which is called the PKK (Pendidikan Kesejahteraan Keluarga) activities by women's groups and another community, has been raising awareness to end the conflict with jointly conduct environmental management. Environmental communication through training activities for residents on how to grow crops and composts has supported the greening of the environment in that region. Other examples of environmental communication activity can also resolve environmental conflicts caused by water crisis that occurred in Batu, Malang, past in mid-2013, also in Tasikmalaya in 2012. Environmental communication is not the dominant form of awareness towards conservation of water resources as a solution of the conflict.

Approach to environmental communication with an emphasis on the role of women is necessary to prevent and resolve conflicts in the urban environment. This shows the relationship aspects of gender and human security, particularly in the environment security, related to the achievement of sustainable development. In this regard, this study aims to identify factors that influence the activity of environmental communication by women activists in

resolving environmental conflicts in urban areas. Development of environmental communication concept with a gender perspective is needed as an input in the formulation of a more gender-sensitive policies to the involvement of women citizens in access environment, in order to achieve overall environmental security.

2. Method

2.1. Conceptual Framework

In connection with the above explanation, the definition of environmental conflict in this study is a result of the different interests of various parties and competing over access to the use of natural resources due to a different understanding of how to access and utilize environmental resources. Environmental conflicts caused by environmental degradation later turned into a social conflict and even violence. Many environmental conflicts are related to the provision of basic needs such as food, water and shelter. The concept of environmental conflict consists of the environmental dimension and the dimension of conflict. The environmental dimension is associated with scarcity and abundance of natural resources while the dimensions of the conflict are associated with different interests and control of the use of natural resources. Related with the theory of environmental conflict called NIMBY (Not In My Back Yard) syndrome, environmental conflicts are due to the transfer of matter to another. This condition is as a symptom of the emergence of individualistic attitude, in which people do not want to bear environmental pollution and the occurrence of gaps in the use of natural resources [6]. An environmental conflict management approaches through a process of communication between all parties to the conflict to get a deal in interpreting the conflict and reach a settlement with, the approach through mediation and negotiation. Mediation is conducted through third-party facilitation in conflict resolution while negotiations are direct talks with the face-to-face communication between the parties to the conflict and bargaining to achieve conflict resolution. In this study, communication in conflict resolution efforts includes a form of environmental communication.

The linkage between environmental communication with a gender perspective in resolving environmental conflicts and human security context, based on a conceptual framework to see the connection between environmental security and gender [7], shown in Figure 1.

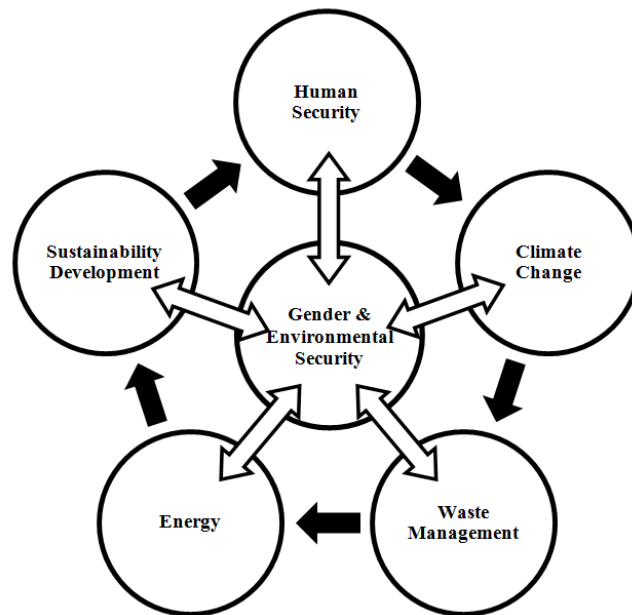


Fig. 1. The linkage models of gender aspects, environmental, and human security.

Related to the conceptual framework in Figure 1, this study elaborated a conceptual components associated with environmental communication concepts and the role of women in environmental security. Environmental communication as the way people communicate has a large effect on the perception of the world or a place to stay, then this perception will shape how people define man's relationship with nature and how humans act to nature. Human understanding of the environment can be the basis of the ability to manage the environment [8]. Environmental management includes anticipation of global warming, reforestation, waste management, pollution prevention and, also energy saving. Various environmental management efforts to communicate persuasively will build awareness and empower citizens in the use of the environment. The concept of environmental sustainability to be one aspect of sustainable development, in which the environment is one of the pillars in addition to economic and social aspects.

The concept of gender is socially constructed values that differentiate women and men regarding their social roles, with a focus on the value of femininity. In the cultural construction and related psychological conditions of women, femininity character leads to self-orientation to quality of life, care, gentleness, empathy, and advanced aspects of parenting. Environmental management and maintenance require empathy in human interaction with the environment. Women tend to have more concern for the environment because of its nurturing character, as in the thought of eco-feminism [9]. In this regard, the concept of environmental communication about distribution message, activities in a persuasive environmental message in order to foster environmental awareness through a variety of communication activities. The concept of environmental communication related to women's roles and their abilities to mediate in environmental conflict with approach from the aspect of femininity. As in the concept of citizen empowerment is assumed to be derived from the concept of human security that focuses on human capabilities, as one of the principles of human security is a human being as the center.

The position of the environmental communication plays an important role in environmental conflict management. Environmental communication can help conflicting parties to separate emotion from a variety of problems, avoid misunderstandings, and enabled the conflicting parties to negotiate their own interests in order to reach an agreement that benefits both parties or all parties. Environmental conflict resolution through environmental communication activities attempts to address the impact of environmental issues that may impact on the overall human survival, well-being and productivity, as part of the human security aspect. Human security and human development move the sustainable development field from a primarily needs-based focus to a rights-based focus in the quest of improving opportunities and capabilities.

Basically, the environmental conflict resolution efforts with community-based approach will provide an opportunity for citizens to participate with open access to the use of natural resources in accordance with the right of every citizen to get justice and security.

2.2. *Research Model*

Exposure based on the conceptual and research purposes in this study is to determine factors affecting communication activities (as dependent variable), three independent variables, which is the value of empathy in maintaining quality of the environment (X1), access to participation in environmental management (X2), and understanding of the situation of environmental conflict (X3). The model analysis can see in Figure 2 below. For analysis of the relationship above, use the following hypothesis, which is:

- H0: There is no influence of the variables X1, X2, and X3 in the variable Y
- H1: There is influence of variables X1, X2, and X3 in the variable Y

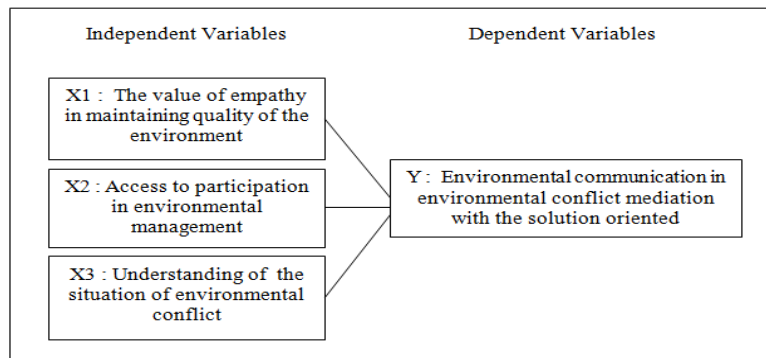


Fig. 2. Relation between variable.

In this study, the operationalization of the concept is done by lowering the indicator variable X1 with socio-cultural construction and suitability of personal character. To have an indicator variable X2 support environmental management activities, control of natural resources, and motivation to perform activities of environmental care. While the indicator variable X3 has the skills to adapt to their environment, awareness of environmental conflicts, and the ability to receive information. On the indicator variable Y has a form of communication, the purpose of communication, the content of the message, and persuasive communication style. In the operational concept, each categorized by the type indicator scale interval in the form of presentation of the Likert scale in the questionnaire.

2.3. Sampling and Location of Study

This study was conducted with a quantitative approach and data collection techniques with literature review and questionnaires. The total sample is 140 respondents, consideration according to the determination of the rationale about the number of samples between 30-500 respondents [10]. Distribution of questionnaires to women's environmental activist in urban areas conducted at three study sites, specifically at Jakarta, Tasikmalaya, and Malang. Site selection study is purposive, with criteria on the study site selection due to the frequent occurrence of environmental conflicts caused by limited land and waste pollution.

3. Results Analysis

The validity and reliability testing were conducted before performing statistical descriptive analyzes and multivariate analysis. Validity of the test results by using factor analysis, known KMO and Barlett's test with a result of 0.749, these results suggests the data can be considered valid. While the results of reliability tests with Cronbach's alpha indicate that 0.802 data are reliable to proceed for further analysis.

3.1. Descriptive Analysis

Descriptive statistical analysis in this study to elaborate on each of the dimensions derived from the independent and dependent variables were analyzed. This analysis is necessary to provide an overview of the situation of the condition of the sample in three study sites, related to respondents' perceptions of the concept being studied.

Environmental communication activities are most often committed by women activists in the three study sites is educational awareness of citizen's rights to Obtain healthy environment (83%) then the activity of the socialization of environmental message (80.8%), as can be seen in Table 1. Communication activities such as environmental, education, and socialization is an activity that promotes the distribution of environmental messages to raise

awareness and knowledge of environmental in the community. This suggests that the necessary information about the current environment for the empowerment of the community.

Table 1. Types of environmental communications activities

Types of environmental communications activities	Frequency (of a total of 140 respondents)	Percentage (from 100%)
Socialization of environmental message	114	80,8%
Educational awareness of citizens' rights to obtain healthy environment	117	83%
Utilization of various types of media for environmental communication	106	75,2%
Advocacy understanding of environmental conflicts	100	71%

In Table 2 below, the environmental management activities are most often committed by women activists is the prevention/anticipation of environmental pollution (92.9%). Based on the analysis, it is also known that 77.9% of respondents had the perception that the socialization of women activists plays a role in motivating people to take preventive environmental pollution.

Table 2. Types of environmental management activities

Types of environmental management activities	Frequency (of a total of 140 respondents)	Percentage (from 100%)
Environmental protection	127	90,1%
The prevention / anticipation of environmental pollution	131	92,9%
Conservation of natural resources / environmental	126	89,3%

Environmental communications activities conducted by women activities have also performed community empowerment. It is intended that the public has the knowledge and skills in environmental management. Can be seen in Table 3, the most empowering activities are conducted training for skills in environmental management (98.6%) and support for entrepreneurship recycling of waste products (94.3%). Training and entrepreneurial activities will provide an opportunity for the public to gain more financial and economic prosperity.

Table 3. Types of community empowerment activities

Types of community empowerment activities	Frequency (of a total of 140 respondents)	Percentage (from 100%)
Support for entrepreneurship recycling of waste products	133	94,3
Facility supplying of environmental management	121	85,8
Access to natural resources / environmental	130	92,2
Training for skills in environmental management	139	98,6

Communication activities conducted by women activists to resolve environmental conflicts in three study sites can be seen in Figure 3. It is clear that more women activists conduct mediation efforts in conflict environment in order to maintain relationships and dialogue to resolve environmental conflicts. Effort to "mediated environmental conflict to maintain relationships" by women activists to build mutual understanding and avoid hostility between the two sides of the conflict. Form of "participation in environmental conflict mediation" by the women activists

includes efforts to be involved as a mediator in resolving environmental conflicts. In addition, the "dialogue to achieve environmental conflict resolution" by women activists was done with face-to-face communication between the two sides in conflict. Women activists tried to "proactively to environmental communication" to provide information about the environment to support environmental management as an environmental conflict resolution. Women activists in Jakarta are more pro-active in environmental communication than women activists in Malang and Tasikmalaya. Also, they participate more in environmental conflict resolution mediation efforts and prefer dialogue to achieve environmental conflict resolution. At the study site in Malang, more women activists proactively conduct environmental communication than women activists in Tasikmalaya. Women activists in Malang also use more dialogue to resolve environmental conflicts than women activists in Tasikmalaya. However, the women activists in Tasikmalaya are more likely to participate in environmental conflict resolution mediation efforts than women activists in Malang.

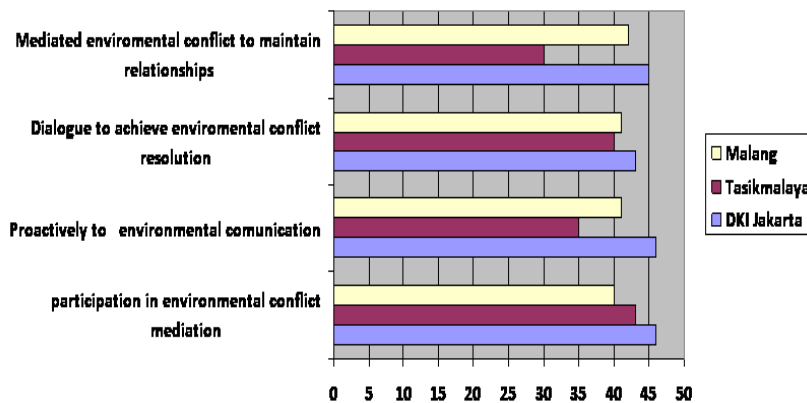


Figure 3. Environmental communication activities in resolving environmental conflicts in 3 location

Types of environmental conflicts that occur in the third location of the study are (1) competition to use land, (2) lack of clean water, (3) air pollution due to smoke in the domestic industry and the bad smell from the slaughterhouse, (4) the waste problem, which includes air pollution caused by the smell of garbage piled up, the smoke from burned garbage, and floods caused by garbage dumped into the river. The cases of environmental conflicts in the Jakarta area are caused by the scarcity of clean water, waste, and pollution due to domestic industry. However, in Tasikmalaya, the environmental problem is due to waste while in Malang, it is due to river pollution (which is a source of clean water) because of the slaughterhouse.

Although women activists in three study sites have been proactive and independent to advocate for environmental communication activities in their communities, the role of government and stakeholders are still needed in addressing environmental conflicts. In Jakarta and Malang, the number of respondents who have a perception of women activists about the importance of government intervention in addressing environmental conflict reach 31.7%, as can be seen in Figure 4, points (a). Furthermore, the number of women activists in Tasikmalaya who have a perception of the importance of government intervention in addressing environmental conflict reach 34.5%. This amount is more than the number of respondents of women activists in Jakarta and Malang.

3.2. Bivariate Analysis

Before hypothesis testing to determine the presence or absence of the influence of X1, X2, and X3 to variable Y, the correlation analysis to determine the correlation of the variable Y, variables X1, X2 variable to variable Y, and the X3 variable to variable Y. Performed correlation analysis technique is Pearson correlation to determine the correlation between each independent variable on the dependent variable.

From the results of average (mean) of the variable X1 for 3.01, this indicates that respondents agreed or tended to think of the value of empathy necessary to maintain environmental quality. Mean on the variable X2 has a value of 3.29, which means that the respondents agreed to the need for access to participation in environmental management. In the X3, the mean value of 3.78, indicating respondents also agreed that it is important to understand the situation of environmental conflicts. Then the variable Y, with a mean value of 3.778 has to be interpreted that the respondents agreed on the importance of communication to resolve environmental conflicts.

With the Pearson correlation test results demonstrate correlation, the variables X1 to variable Y has a value of 0.143, X2 variable to variable Y has a value of 0.276, and the X3 variable Y has a value of 0.835. These results indicate that the variable X1 has a relationship with the Y variable but very weak and almost negligible, and the variable X2 has a relationship with a variable Y that includes weak, while the X3 has a strong relationship with the variable Y because it has a value of 0.835. *P* value of the variable X1 is based on the results of the partial correlation test showed the value of 0.09 is greater than the limit level of significance (0.05) so that the correlation is not significant. On the variables X2 and X3 variables have the results of each of *p* value indicates the value of 0.001 and 0.000 so that can mean a significant correlation.

3.3. Multivariate Analysis

After the correlation analysis performed, to analyze the effect of the variables X1, X2, and X3 to variable Y, used regression analysis techniques, which begins with a multiple regression analysis followed its path analysis. To analyze the effect of the variables X1, X2, and X3 to variable Y, used regression analysis techniques, which begins with a multiple regression analysis followed its path analysis.

Furthermore, the results of R (correlation coefficient) of 0.837, this shows the relation X1, X2, X3, and Y is a strong relationship, and the results adjusted R Square of 0.693 indicates that 69.3% of the three independent variables (X1, X2, X3) is able to predict the dependent variable (Y), while the remaining 30.7% came from other factors.

On the results of ANOVA, F values calculated from the results (using SPSS), has a value of 105 782, while F table has a value of 2.6 (the calculation with $df_1 = 3$ and $df_2 = 140 - 3 - 1 = 136$) so that the calculated F value is more greater than F table, then H_0 is rejected, by accepting H_1 that there are significant variables X1, X2, and X3 to variable Y. The value of F also shows that the significant value of the linear relationship between the independent variables X1, X2, and X3 to variable Y. *P* results also have value or significance of 0.000 indicates the value is smaller than the significance level of 0.05 so that there is meaningful or significant influence between the variables X1, X2, and X3 together to variable Y. Therefore, the regression equation is $Y = 0.494 + 0.017 X_1 + 0.814 X_2 + 0.048 X_3$.

While the results of path analysis, the path coefficient is known of the Beta value, the variable X1 has a value of 0.017, the variable has a value of 0.046 X2, and X3 variables have a value of 0.820. By knowing the results of R Square of 0.7 it can be seen residual (ϵ) = $\sqrt{1 - R \text{ Square}} = \sqrt{1 - 0.7} = 0.54$. This shows that the line equation is $Y = 0.017X_1 + 0.046 X_2 + 0.820 X_3 + 0.54$.

Difference in the value of the path coefficients can be determined by who has the value t 2,084 t while the table has a value of 2.6. This shows the value of t is smaller than the value of t table. This shows that there is no difference between the effect of the variables X1, X2, X3 and the variable Y has no significant difference, although p has a value of 0.04 indicates partially the influence of variables X1, X2, and X3 to variable Y. For each variable, the t value in the variable X1 has a value of 0.349, while the table t has a value of 2.6 which is in the reception area of H_0 because t value is smaller than the value of t -table. This means there is no effect on the variable X1 variable Y with p has a value of 0.728 which showed no significant results. Similarly, at variabel X2 with t value is 0.908

which is also smaller than t table, so that means there is no effect of X_2 on Y and p -value is not significant because 0,365 is greater than the significance level of 0.05. Unlike the X_3 variable, with t count of 16.743 is greater than t table so that it rests on a rejection of H_0 region, where there is the effect on variable Y significantly, with large p -value of 0.000.

The overall conclusions of the analysis, with the acceptance of the hypothesis H_1 to model the analysis of the relationship between the variables X_1 , X_2 , and X_3 to variable Y , shows the influence of variables X_1 , X_2 , and X_3 on variable Y are significantly and has a linear relationship with a positive direction.

4. Results and Discussions

This study uses environmental conflict resolution using a transformation-constructive approach with community-based perspective. For some cases in Indonesia, transformative approach is applied in resolving environmental conflicts, including in 2007 in the city of Bandung. The case related with environmental conflict was when residents of Griya Cempaka Arum rejected plans to build power plants and garbage power PLTSa Quadrant for waste management. These events led to a conflict between citizens and local government officials. Conflict resolution in this case can be resolved through mediation and negotiation. Similarly, in the case of environmental conflicts in Kenya, which occurred in 2009, the case of water scarcity and deforestation can be resolved by mediation. Environmental problem is not a physical problem, but the subject interests include dimensions culprit. In the case of the research in Jakarta, Tasikmalaya, and Malang, also because of environmental conflicts related to water scarcity issues and the competition for land use for business and residential interests, related waste management. Environmental conflict resolution in Jakarta, Tasikmalaya, and Malang also involves community participation in environmental conflict resolution through environmental communication activities undertaken by women activists from the community.

Environmental communication in the environmental conflict management can lead to dispute settlement towards consensus in solving environmental problems that occur. The ability and skills related with environmental communication are needed to resolve environmental conflicts. Based on the analysis, the variable X_3 which is compared with variables X_1 and X_2 has a strong correlation with variable Y . Hypothesis test results showed that all three basically independent variables have influence and can explain the dependent variable with a value of 69.3%. Theoretically, this indicates that the variable X_3 , which represents the concept of individual personality in the form of understanding of environmental conflicts, becomes the main factor that affects the individual's ability to communicate and resolve environmental conflicts.

While other factors with a value of 30.7% assumed to come from external factors faced by women activists is known as the descriptive analysis that the importance of the role of government and stakeholders (NGOs, companies, universities, and others) in environmental conflict resolution will support woman activist's environmental communication skills.

This study shows the importance of women's role in addressing environmental conflicts that occur. Women activists prioritize communication goals made in order to keep harmonious relationship. Communication styles of women activists who do have a tendency to be cooperative because women have an orientation maintaining relationships in the future and for the overall welfare of the community. Women activists would be more likely to choose mediation and negotiation efforts in environmental conflict resolution. Communication with the dialogue in order to know the main issues of conflict and prioritize the deliberations in order to reach agreement on the resolution of conflicts. This relates to the character of women's femininity, which has a self-orientation in order to maintain sustainable living people in their communities. From the aspect of culture in Indonesia, mediation efforts in conflict resolution environment called the "musyawarah", which is used to describe a form of decision-making to reach agreement. Musyawarah or deliberation is a process of shared decision-making that the goal is to reach a consensus. In Indonesia, the consensus is generally seen as a solution in which all parties can accept, and ideally supported by all stakeholders unanimously. In addition to mediation, the ongoing dialogue process, often not structured with the general discussion, the topic of change freely from one problem to another, all parties involved in the conflict to explore and define the problem in more detail, ask each other and identify the interests of the or underlying conditions that must be addressed as a joint solution. This is still pursued by women activists in

communicating and motivating people to perform activities of environmental management as a solution in resolving environmental conflicts.

5. Conclusion

Basically, face-to-face negotiations can be a more effective means to address and resolve environmental conflicts. Mediated negotiations will provide affected parties with an opportunity to express their concerns to government officials and industry, solving the original dialogue that will include compensation, pollution control, and public participation in the monitoring and implementation that may not be achieved if the decision through the courts. Environmental communication activities undertaken by women activists have the effect of empowering the community with environmental management and environmental conflict resolution. Both of these activities will lead people to obtain welfare and reached a safe environment. Related to the concept of human security, environmental security conditions become an important element for achieving sustainable development. Therefore, the policy required a more gender sensitive, particularly in environmental management, in order to establish an equal partnership between women and men as actors in the implementation of sustainable development. Role of women in environmental conflict resolution activities also need to be considered by the government and the various stakeholders involved with providing ease of access and opportunities to participate. The implications of this study theoretically, which can be used for the development of the concept of the integration of environmental communication, gender, and environmental security, in particular the concept of environmental conflict. Moreover, in practice this study provides input for the formulation of policies on women's empowerment and environmental management to be more gender sensitive.

To develop this study, the future research should be conducted in the mix method, with the elaboration of the concept conducted qualitatively to determine the position and role of women in striving for security in the community, with a review of multidisciplinary, interdisciplinary, and greater understanding of the problem situation complex.

Acknowledgement

Thanks to Directorate on Research and Community Service Universitas Indonesia (DRPM UI) for the help of a sponsor in attending this event.

References

- [1] Renner, M. *Fighting for Survival: Environmental Decline, Social Conflict and the New Age of Insecurity*. New York: W.W. Norton and Company; 1996.
- [2] Agarwal, B. Conceptualizing Environmental Collective Action: Why Gender Matters. *Cambridge Journal of Economics*, 2000; **24**:283-310.
- [3] Dankelman, I. *Gender, Environment, & Sustainable Development: Theoretical Trends, Emerging Issues, and Challenges* (pp. 5 – 7). Review Paper. New York: INSTRAW; 2003.
- [4] Blocker, T.J & Eckberg, D.L. *Gender and environmentalism: Result from the General Social Survey*, *Social Science Quarterly*. 1997; **78** (4): 841-858.
- [5] Cox, R. Environmental Communication and the Public Sphere, <http://greenpressnetwork.wordpress.com>; 2008.
- [6] Baiquni, M & r. Rijanta. Conflict environment and resource management in the era of autonomy and community transitions (understanding [7] theoretical and empirical understanding), <http://www.akademik.unsri.ac.id>, 2008.
- [8] Wilkister, SM. *Gender and Environmental security*. San Jose: UPEACE; 2012.
- [9] Milstein, T. *Encyclopedia of communication theory*. Mexico: Sage Publication; 2009.
- [10] Clarke, M. *The Good-Natured Feminist: Ecofeminism and the Quest for Democracy by Catriona Sandilands; Feminism and Ecological Communities; An Ethic of Flourishing by Chris Cuomo. NWSA Journal*. Bloomington: Summer, 2001. **13**, Iss. 2; (pp. 210)
- [11] Gay, L.R. dan Diehl, P.L. *Research Methods for Business and Management*. New York: MacMillan Publishing Company; 1992.